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ABSTRACT

The purpose of this illustrated booklet is to teach 11-14 year old students that all healthy Americans, 2 years of age or older, should eat in a way that is low in saturated fat and cholesterol to help reduce the risk of heart disease. The guide is designed to promote changes in eating patterns, to show children how to switch to good eating habits, and to tell students how to choose a variety of foods. In addition, other healthful behaviors such as regular physical activity to lower blood cholesterol levels are stressed. Emphasis is placed on: how different parts of the heart work together to pump blood through the body; controlling risk factors for heart disease; different nutrients needed to stay healthy; the richest source of calories--eating too much fat; how saturated fats raise blood cholesterol levels; and how to choose foods that are lower in saturated fat and cholesterol. In addition, vending machine food, the creation of bag lunches, eating out, fast foods, and exercise are addressed. Learning activities include filling in a family tree to determine how heredity influences blood cholesterol levels, and tracking one's own blood cholesterol levels. (LL)

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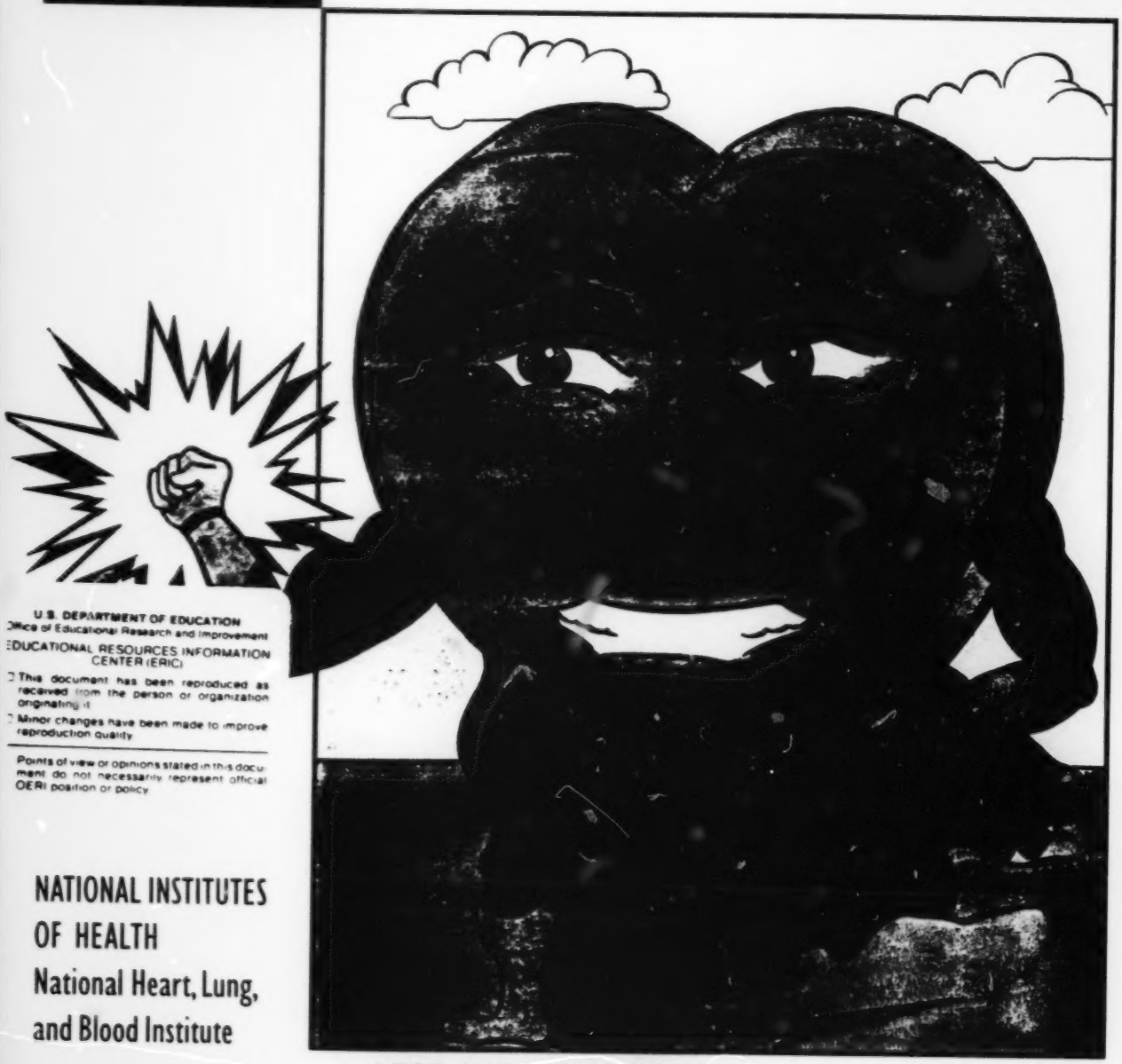
11 to 14 Year Olds

Heart Health... Your Choice



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The information contained in this publication should not be used as a substitute for the medical care and advice of your physician. There may be variations in treatment that your physician may recommend based on the individual facts and circumstances.

STRANGE EVENTS HAVE EXPOSED A STARTLING FACT— THE FORCES OF HIGH BLOOD CHOLESTEROL HAVE RISEN TO CHALLENGE ALL HUMANITY! BUT MANKIND HAS UNEXPECTED ALLIES— HEARTMAN AND HIS FAMILY! YET, HEARTMAN CANNOT PREVAIL ALONE. THE SECRET TO WINNING THIS BATTLE LIES WITHIN THE PAGES OF THIS BOOK. YES, IT'S UP TO <u>YOU</u> TO DO SOMETHING TO HELP. YOU CAN, YOU <u>MUST</u>...

MANY ADULTS IN THE UNITED STATES HAVE HIGH BLOOD CHOLESTEROL WHICH INCREASES THEIR CHANCE OF HEART DISEASE.

We all make lots of choices every day. How many times in the last week did you think about why you made particular choices? For example, how much thought did you put into the food you ate? Think about what you ate last night for dinner. Why did you eat what you did? Is it because your family loves the taste? Or, was it because you were busy and only had time to grab a snack?

Choosing the foods we eat every day is affected by many things. And, what we eat affects our overall health and well-being. Did you know that eating foods high in saturated fat and cholesterol can increase blood cholesterol levels?

Heart disease is the number one killer of adults in America. Many adults have high blood cholesterol levels which increases their chance, or risk of heart disease. If they lower their level, they reduce their risk.

Even kids can have high blood cholesterol. You may feel good and look good, but you may have high blood cholesterol. You cannot see or feel high blood cholesterol. Now, what does that have to do with what you ate last night? Your eating habits, along with your exercise and smoking habits, have a big effect on your blood cholesterol level. You can choose to do something about them:

- Eat right.
- Exercise...be active.
- Don't start smoking; quit if you do smoke.

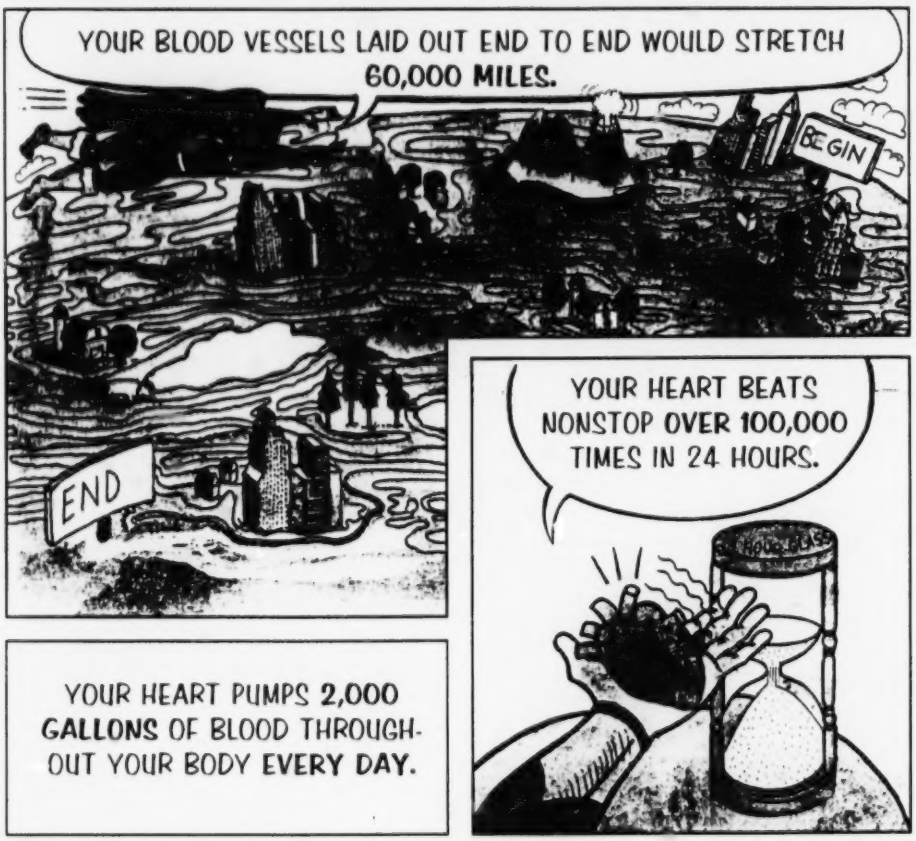
Eating right means eating what your body needs to grow and stay healthy. It also means eating less saturated fat and cholesterol. This helps you lower your blood cholesterol level. Exercise not only strengthens your heart but may help your cholesterol level too. Cigarette smoking also affects your level. Quitting may help it. Never starting is even better.

Read on to find out how *your* cholesterol level is related to your heart health. This booklet explains how you can take control of your blood cholesterol level and heart health.

AT THE HEART OF THE MATTER

Your heart is one of your strongest muscles. It has to be strong to pump blood to all parts of your body through thousands of miles of blood vessels every day—all day. Blood carries the nutrients and oxygen your body needs to keep going.

LITTLE-KNOWN HEART FACTS


YOUR BLOOD VESSELS LAID OUT END TO END WOULD STRETCH 60,000 MILES.
BEGIN
END
YOUR HEART BEATS NONSTOP OVER 100,000 TIMES IN 24 HOURS.
YOUR HEART PUMPS 2,000 GALLONS OF BLOOD THROUGHOUT YOUR BODY EVERY DAY.

Just how hard does your heart work? That depends on what you are doing. An adult's heart beats about 60 to 100 times a minute. When you are excited or scared, it beats faster. When you exercise, your heart beats much faster and works harder so that your blood can take extra nutrients and oxygen to your muscles.

Your heart muscle needs nutrients and oxygen too. It uses them to produce energy for its constant pumping. The heart muscle has its own system of blood vessels. The coronary (heart) arteries are the ones that supply the heart with nutrients and oxygen (O_2).

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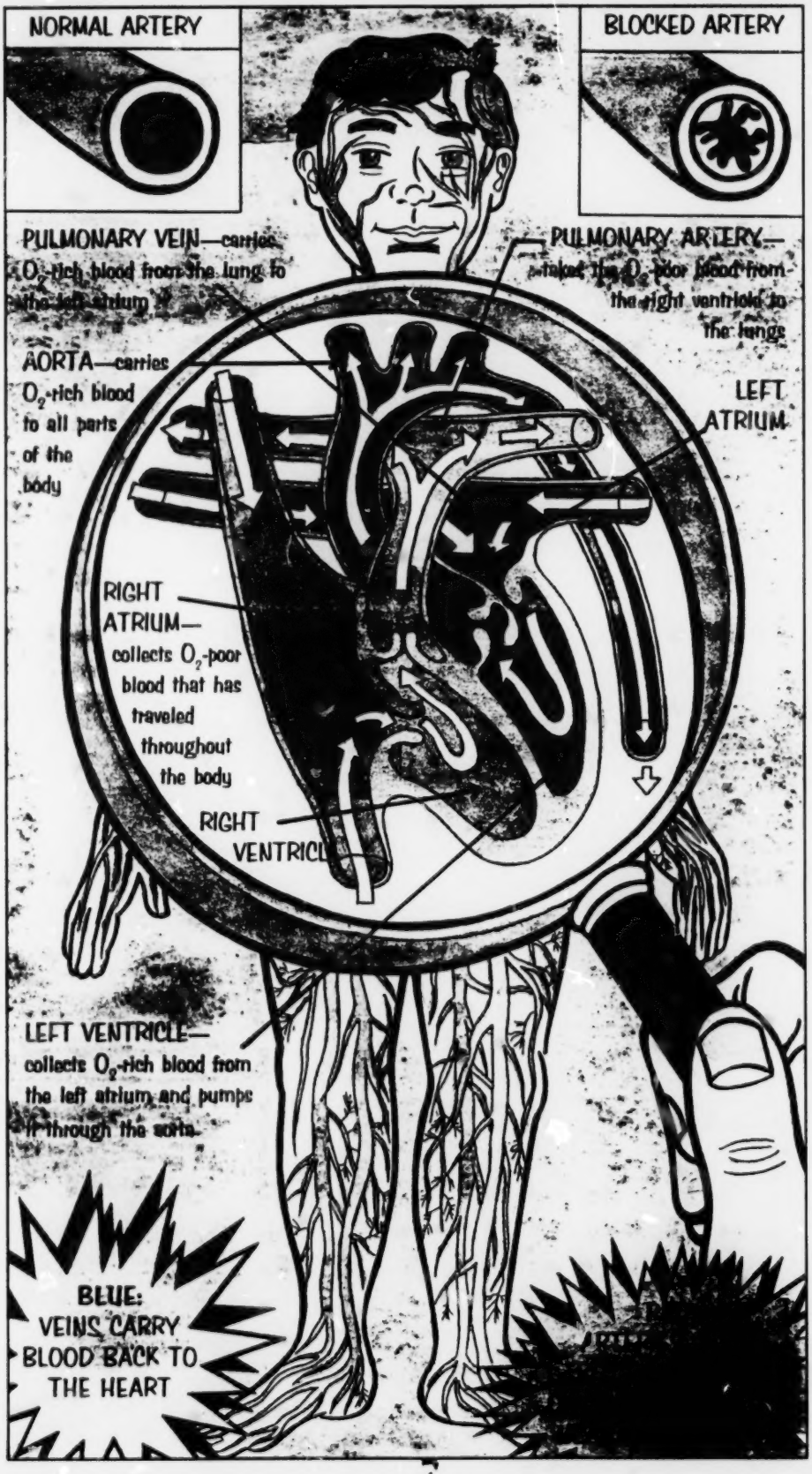
THE DIFFERENT PARTS OF THE HEART WORK TOGETHER TO PUMP BLOOD THROUGH THE BODY.


NORMAL ARTERY
BLOCKED ARTERY
PULMONARY VEIN—carries O_2-rich blood from the lung to the left atrium
PULMONARY ARTERY—takes the O_2-poor blood from the right ventricle to the lungs
AORTA—carries O_2-rich blood to all parts of the body
LEFT ATRIUM
RIGHT ATRIUM—collects O_2-poor blood that has traveled throughout the body
RIGHT VENTRICLE
LEFT VENTRICLE—collects O_2-rich blood from the left atrium and pumps it through the aorta
BLUE: VEINS CARRY BLOOD BACK TO THE HEART

All during your life, fat and cholesterol begin to build up in your arteries. The higher the cholesterol is in the blood, the more it builds up in the arteries. This makes the opening in the arteries get smaller. Other factors also influence this process. If the opening in the coronary arteries becomes too small, not enough blood gets through. This happens usually after 60 or 70 years. Then, chest pain and other heart problems like a heart attack may result.

You can slow down or stop the buildup of fat and cholesterol in your arteries. How? By eating right, getting the right kind of exercise, and by not smoking.

I'M TOO YOUNG FOR A HEART ATTACK

True. Most people who have heart attacks or heart disease are much older than you. But at your age, it is important to think about your health and what you can do now to prevent problems when you get older. High blood cholesterol, high blood pressure, smoking and obesity (being too fat) increase your risk of getting heart disease later in life. So they are often called "risk factors." Fortunately, you can do something to help control all of these risk factors.

To begin with, eating right and exercising are habits to start now. They can help you control or lower your blood cholesterol. They will also help you stay at a healthy weight. Staying at a healthy weight not only helps control or lower your blood cholesterol level but also your blood pressure. And, these healthy habits can last your whole life.

Smoking is one of those bad habits that also lasts a lifetime. It is much better never to start smoking than to try to quit later on. Smoking makes your heart beat faster, narrows your arteries and veins so less blood gets to your heart, and makes your blood pressure go up. It also decreases the amount of oxygen in your blood which makes it harder to exercise.

You Can Do Something to Help Control All of These Risk Factors for Heart Disease.

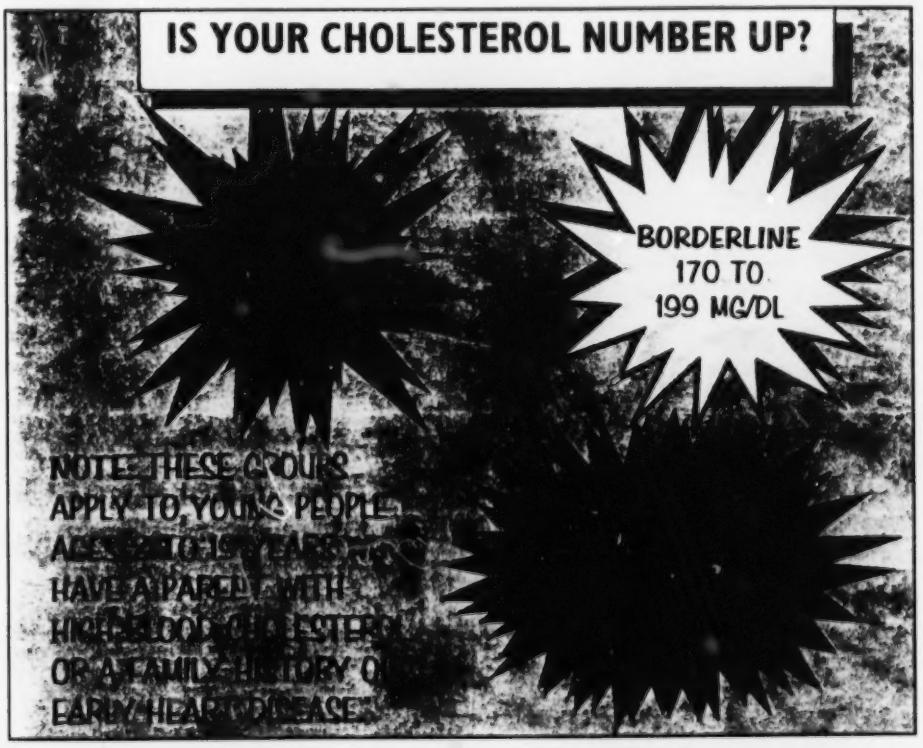
RISK FACTORS FOR HEART DISEASE YOU CAN CONTROL

DO I NEED TO KNOW MY CHOLESTEROL NUMBER?

Not every child needs to know his or her cholesterol level. If either of your parents has high blood cholesterol (greater than or equal to 240 mg/dL), or if they or your grandparents got heart disease before they were 55 years old, your doctor may want to know your cholesterol level. Cholesterol levels are checked by taking some blood out of your vein or your finger. Your doctor may measure it several times. This is okay. Several measurements will help him or her know what your cholesterol level really is.

Blood cholesterol is given as a "number" followed by "mg/dL." Mg/dL stands for milligrams per deciliter which is a unit of measurement. If you want to know your cholesterol level, just ask your doctor. He or she will probably give you your **total** cholesterol number.

For someone age 2 to 19, a total cholesterol number less than 170 mg/dL is **acceptable**. If it is between 170-199 mg/dL, it is **borderline**. If your total cholesterol is 200 mg/dL or more, it is **high**. If it is borderline or high, it is important for you to eat right in order to help lower it. In fact, eating right is key to having an acceptable cholesterol level.



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EAT RIGHT

EAT RIGHT TO LOWER YOUR BLOOD CHOLESTEROL LEVEL.

Eating right to lower your blood cholesterol level means you need to eat:

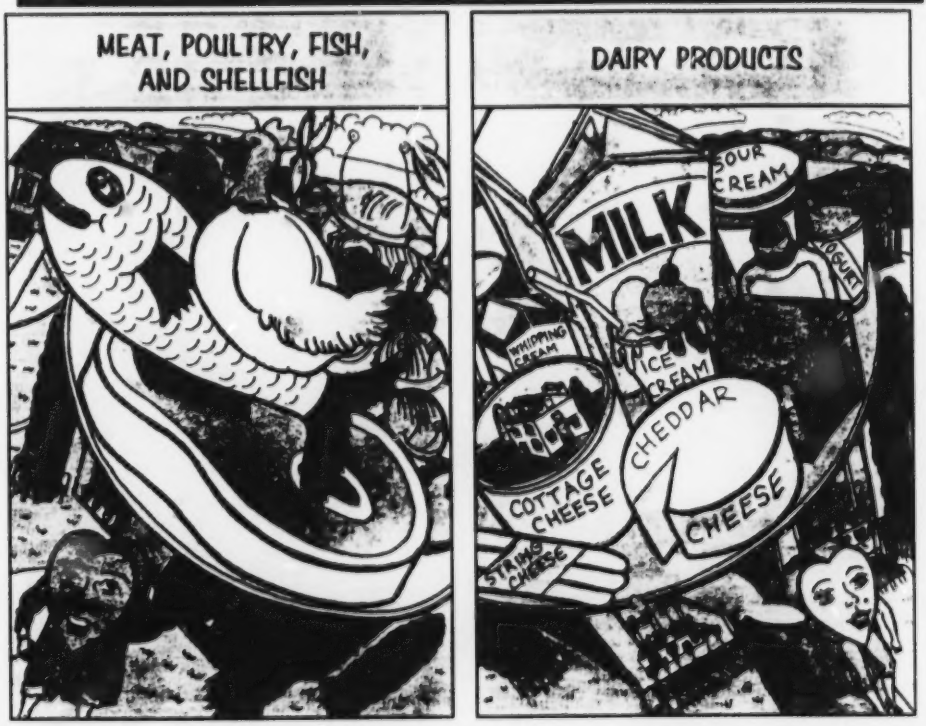
- A variety of foods.
- Less total fat.
- Less saturated fat.
- Less dietary cholesterol.

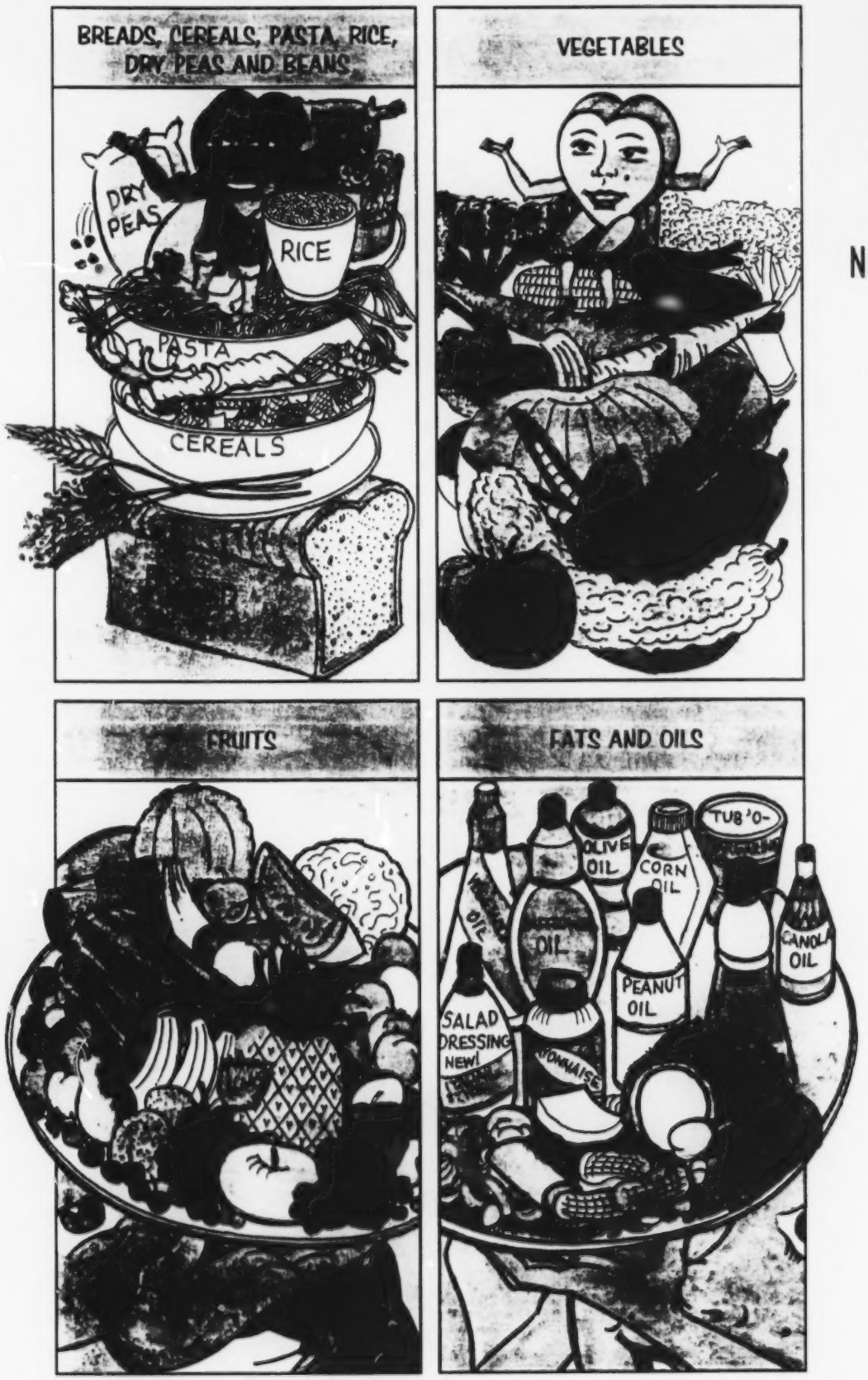
If you are overweight, you may need to adjust the calories you eat to achieve and maintain a healthy weight and this often helps lower the cholesterol. Choose from a wide variety of low-fat foods and increase your physical activity.

EAT A VARIETY OF FOODS

You need many different nutrients to grow and stay healthy. These include vitamins, minerals, protein, fat, and carbohydrate. Different nutrients are found in different foods. So, eating many different types—a variety—of foods from each of the food groups every day is important to get the right balance of nutrients.

FOODS ARE GROUPED BY THE NUTRIENTS THEY CONTAIN. THESE GROUPS ARE:





You Need Many Different Nutrients to Stay Healthy.

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FATS ARE THE RICHEST SOURCE OF CALORIES. IF YOU EAT TOO MUCH FAT OF ANY TYPE, CALORIES CAN ADD UP FAST.

Within each group, try to vary what you choose. For example, when you choose a day's worth of fruit, choose among apples, bananas, grapes, and orange juice instead of all apples. Each fruit provides different amounts of nutrients even though they are in the same group. They also taste different so you won't get bored.

Some people think that the only way to eat in a heart healthy way is to become a vegetarian and not to eat any animal foods. This is not true. You can still eat animal foods, just make choices that are lower in saturated fat and cholesterol, like poultry, fish, lean meats and low-fat cheeses. Also keep in mind that it may be difficult to cut out all animal foods and get the nutrients you need to grow.

Besides nutrients, foods also are a source of calories. Did you know that proteins and carbohydrates provide 4 calories per gram? And fats, regardless of the type, provide 9 calories per gram. These calories give you the energy you need to grow, play sports, and do your homework. The calories you need depend on many things. You may need a lot of calories if you are growing quickly, or if you get a lot of exercise. Boys often need more calories than girls. However, if you eat more calories than you use up for activity and growth, you could get fat. So, plan ahead. If you're not going to be very active, you may want to cut back on high calorie choices, like chocolates or other sweets. Some kids plan their meals and snacks around what activities they plan for the day.

But it is not enough to think of nutrients only as sources of energy and calories. Proteins are important for muscle and building other tissues. Now a word about fats.

There are two major types of fat—**saturated** and **unsaturated**. Together, they equal total fat. All foods that contain fat contain a mixture of saturated and unsaturated fats. Unsaturated fats are often further grouped as either polyunsaturated and monounsaturated fats. In order to lower your blood cholesterol level, you need to eat less saturated fat.

Saturated fat should be limited to less than 10 percent of your total calories each day. One way to do this is eat less total fat. In fact, you should limit your total fat to less than 30 percent of your total calories. This helps you cut back on saturated fat as well.

Saturated fat and cholesterol in your foods can raise your blood cholesterol level. Butter, cheese, whole milk, ice cream, and cream all contain a lot of saturated fat. Saturated fat is also concentrated in the fat that surrounds meat, the white streaks of fat in the muscle of meat, and the skin of poultry. Many baked goods and snacks are high in saturated fat. Cutting back on saturated fat not only helps keep your blood cholesterol low, but also helps you control your calorie intake.

WE'D BETTER TELL THE BODY TO COOL IT ON THE FATS NOW!
CHD RISK
DANGER
TASTES GREAT!
YOUR BODY LIKES THE TASTE OF FATTY FOODS. EXCESS FAT NOT BURNED OFF BECOMES FAT ON YOU!
BLOOD CHOLESTEROL LEVELS
SATURATED FAT
TOTAL FAT
CHOLESTEROL

Saturated Fat Raises Your Blood Cholesterol Level More Than Anything Else You Eat.

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Cholesterol is found only in foods that come from animals. Meat, poultry, fish, and dairy products all contain cholesterol. Egg yolks and organ meats, like liver, have large amounts. Foods from plants, like peanut butter, do not have any cholesterol. Peanut butter is also low in saturated fat, but is high in total fat.

EGGS

EGGS YOLKS ARE HIGH IN CHOLESTEROL. ON THE OTHER HAND, EGG WHITES HAVE NO CHOLESTEROL AND ARE A GOOD SOURCE OF PROTEIN.

YOU CAN CUT BACK ON THE CHOLESTEROL THAT YOU EAT AND STILL EAT EGGS FOR BREAKFAST. SCRAMBLED EGGS, FOR EXAMPLE, CAN BE MADE WITH A MIXTURE OF MORE EGG WHITES THAN YOLKS. AS YOU LEARN TO COOK, YOU WILL ALSO LEARN THAT YOU CAN USE EGG WHITES IN PLACE OF YOLKS IN MANY RECIPES.

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CHANGING THE FOOD YOU "CHEWS"

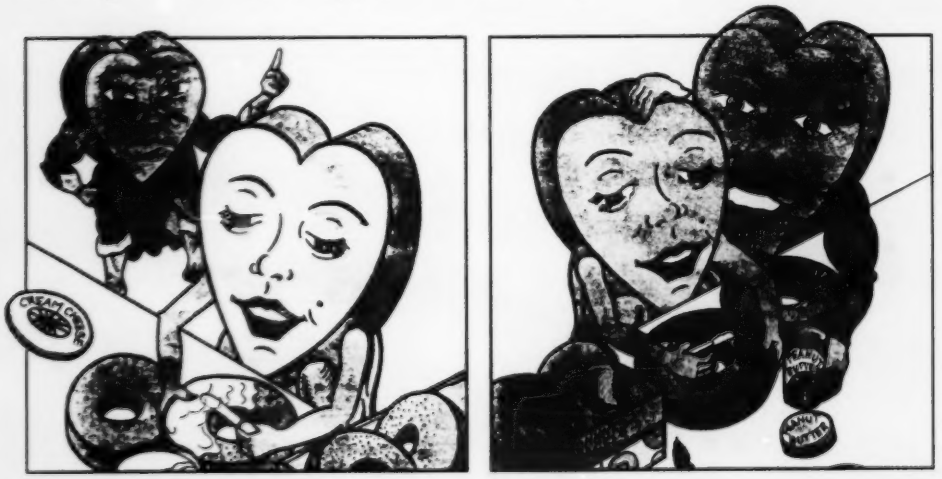
The food group charts, "Foods Are Not Good or Bad...Eating Habits Are," (pages 14-23) provide the basics of choosing a variety of foods lower in saturated fat and cholesterol. Choose foods from each food group every day. In each food group, eat foods from the **Choose** column more often than from the **Decrease** column. The **Choose** column contains foods lower in saturated fat and cholesterol. The **Decrease** column contains foods higher in saturated fat and cholesterol.

Remember, choosing foods lower in saturated fat and cholesterol is key to lowering your blood cholesterol level. Often, these foods are not even different from the ones you like to eat. They may be simply prepared differently.

EXTRAS ADD A SPECIAL TOUCH

The extras you add to your foods or cook with sometimes add saturated fat and cholesterol. Do you bake cookies with butter or lard? Do you smother your salad with creamy dressing? Or do you spread lots of cream cheese on your bagel?

You probably think that cutting down on saturated fat and cholesterol means that you can't eat *anything* that tastes good. **WRONG**. Your food will still taste good even though you use smaller amounts of extras like butter or creamy dressing. Better yet, choose extras that are lower in saturated fat like margarine, or peanut butter for your bagel. To add flavor (without saturated fat) to your sandwiches use foods like ketchup, mustard, chili sauce, jelly, pickles, onion, radishes, sprouts, shredded cabbage or carrots, chopped fruit or celery.



CHOOSE EXTRAS THAT ARE LOWER IN SATURATED FAT AND CHOLESTEROL.

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FOODS ARE NOT GOOD OR BAD... EATING HABITS ARE

MEAT, POULTRY, FISH, AND SHELLFISH

Just because some of the foods in this food group may be high in saturated fat and cholesterol, that does not mean that you should give them up. Instead, you can:

- ☆ **choose foods with less saturated fat such as poultry, fish and leaner cuts of meat.**
- ☆ **cut off visible fat from meats, and take the skin off chicken and turkey.**
- ☆ **cut back on foods made with or cooked in a lot of fat like fried foods.**

NUTRIENTS: **Protein, vitamins, minerals (like iron), saturated fat, and cholesterol.**

CHOOSE

LEAN CUTS OF MEAT WITH THE FAT CUT OFF LIKE ROUND STEAK AND SIRLOIN, EXTRA LEAN HAMBURGER

CHICKEN OR TURKEY WITHOUT THE SKIN

FISH

SHELLFISH LIKE CRABS, CLAMS, AND SCALLOPS

LEAN LUNCH MEAT LIKE TURKEY, CHICKEN, TURKEY HAM, LEAN HAM, OR LEAN ROAST BEEF. CHICKEN HOT DOGS ARE A BETTER CHOICE THAN BEEF HOT DOGS. BUT, THEY ARE STILL HIGH IN SATURATED FAT. CHOOSE THEM ONLY ONCE IN A WHILE.

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DECREASE

FATTY CUTS OF MEAT LIKE REGULAR HAMBURGER, SPARERIBS

BACON, SAUSAGE

FRIED CHICKEN, CHICKEN OR TURKEY WITH THE SKIN

FRIED FISH, FRIED SHELLFISH

LIVER OR KIDNEY

LUNCH MEAT LIKE BOLOGNA, SALAMI, SAUSAGE, BEEF OR PORK HOT DOGS

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CHOOSE

SKIM OR 1% MILK

BUTTERMILK

NONFAT OR LOW-FAT YOGURT

LOW-FAT COTTAGE CHEESE

LOW-FAT CHEESES LIKE LOW-FAT, SKIM OR PART-SKIM MILK CHEDDAR OR STRING CHEESE

ICE MILK

FROZEN YOGURT

DAIRY PRODUCTS

Here's another food group that many cut out because they are trying to lose weight or because some of the foods are high in saturated fat and cholesterol. Dairy products are a great source of calcium which helps to build strong bones and teeth. And, because your bones are growing quickly, now is the best time to eat foods high in calcium. Try these low-fat calcium boosters:

- ☆ Choose 1%, low-fat, nonfat, or skim milk dairy products.
- ☆ Most low-fat dairy products have more calcium than the high fat varieties.

NUTRIENTS: Protein, vitamins, minerals (especially calcium), saturated fat, and cholesterol.

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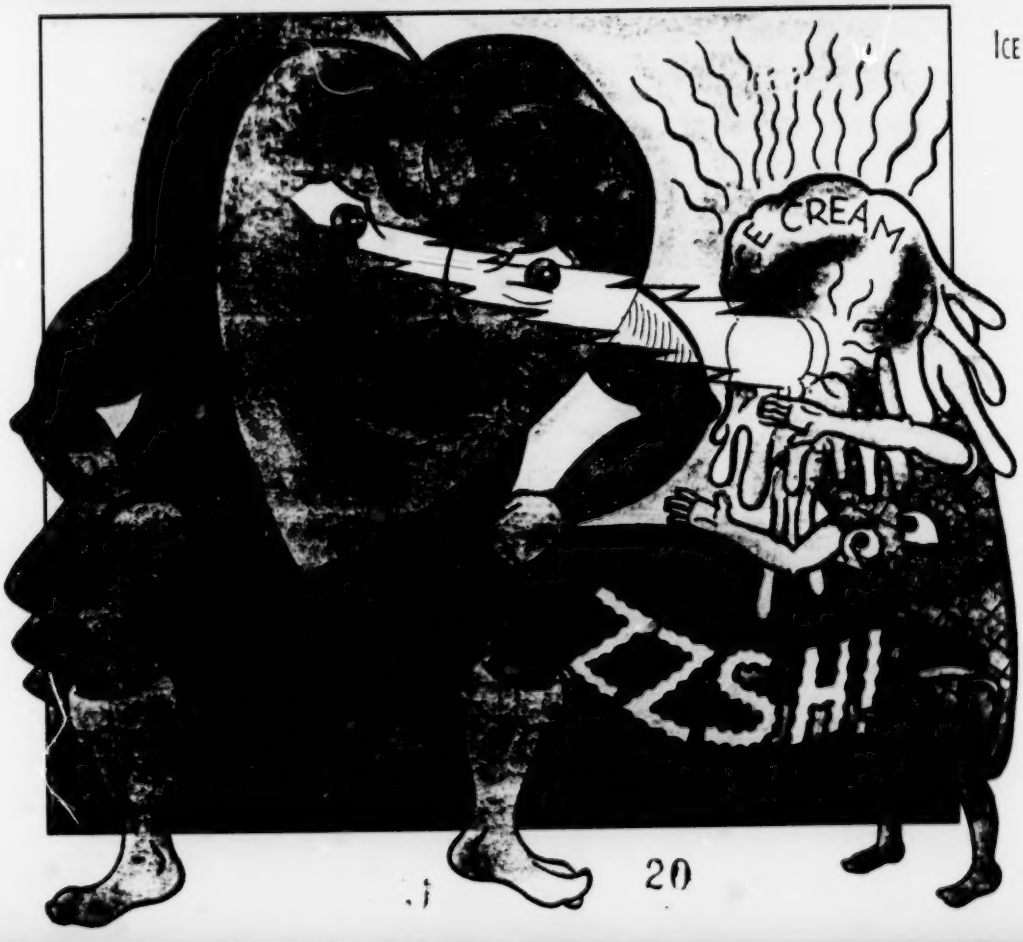

DECREASE

WHOLE OR 2% MILK

CREAM

WHOLE-MILK YOGURT

CUSTARD-STYLE YOGURT

HIGH-FAT (4%) CREAMED COTTAGE CHEESE

HIGH-FAT CHEESE LIKE AMERICAN, CREAM CHEESE, SWISS

ICE CREAM

CHOOSE

WHOLE-GRAIN BREAD, LIKE BRAN, RYE, WHOLE WHEAT

HAMBURGER AND HOT DOG BUNS

PITA BREAD, BAGELS, TORTILLAS

MOST CEREALS

RICE OR PASTA LIKE SPAGHETTI, MACARONI, AND PLAIN NOODLES

ANIMAL CRACKERS, GRAHAM CRACKERS, PRETZELS

HOMEMADE QUICK BREADS, MUFFINS, PANCAKES, AND WAFFLES MADE WITH LOW SATURATED FAT AND CHOLESTEROL INGREDIENTS

DRY PEAS AND BEANS LIKE KIDNEY BEANS, CHICK PEAS, LENTILS, BLACK-EYED PEAS

SOUP LIKE CHICKEN OR BEEF NOODLE, TOMATO, VEGETABLE

BREADS, CEREALS, PASTA, RICE, DRY PEAS AND BEANS

The foods in this group get a bad rap as being high in calories. NOT TRUE. They actually contain little or no fat, or saturated fat. It's what you put on top of them like cream or cheese sauces, or butter, that may be high in calories and saturated fat. As an extra bonus, this group is a great source of carbohydrates that turns into energy for your muscles to use when you are active. To keep this food group heart healthy:

- ☆ use small amounts of margarine on toast, pancakes, or waffles.
- ☆ spread your sandwich with reduced fat mayonnaise, ketchup, mustard, or relish.
- ☆ use sauces made with tomatoes or use low-fat cheeses on pasta.
- ☆ munch on lowfat snacks like pretzels, graham crackers, or tortillas.

NUTRIENTS: Carbohydrates, protein, vitamins, minerals, and fiber.

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DECREASE

BUTTER ROLLS, CROISSANTS

SOME GRANOLA CEREALS

EGG NOODLES

PASTA AND RICE PREPARED WITH CREAM, BUTTER, OR CHEESE SAUCES

CHEESE OR BUTTER CRACKERS

STORE-BOUGHT MUFFINS, DOUGHNUTS, SWEET ROLLS, DANISH PASTRY OR COOKIES MADE WITH HIGH SATURATED FAT AND CHOLESTEROL INGREDIENTS

POTATO OR CORN CHIPS

SOUPS MADE WITH CREAM OR WHOLE MILK

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VEGETABLES

Vegetables easily fit into a heart healthy way of eating. They have almost no saturated fat and no cholesterol. Try them:

- ☆ raw with low-fat dips like salsa or just plain.
- ☆ cooked with small amounts of margarine, lemon juice, or pepper for flavor.

NUTRIENTS: Carbohydrates, fiber, vitamins, and minerals.

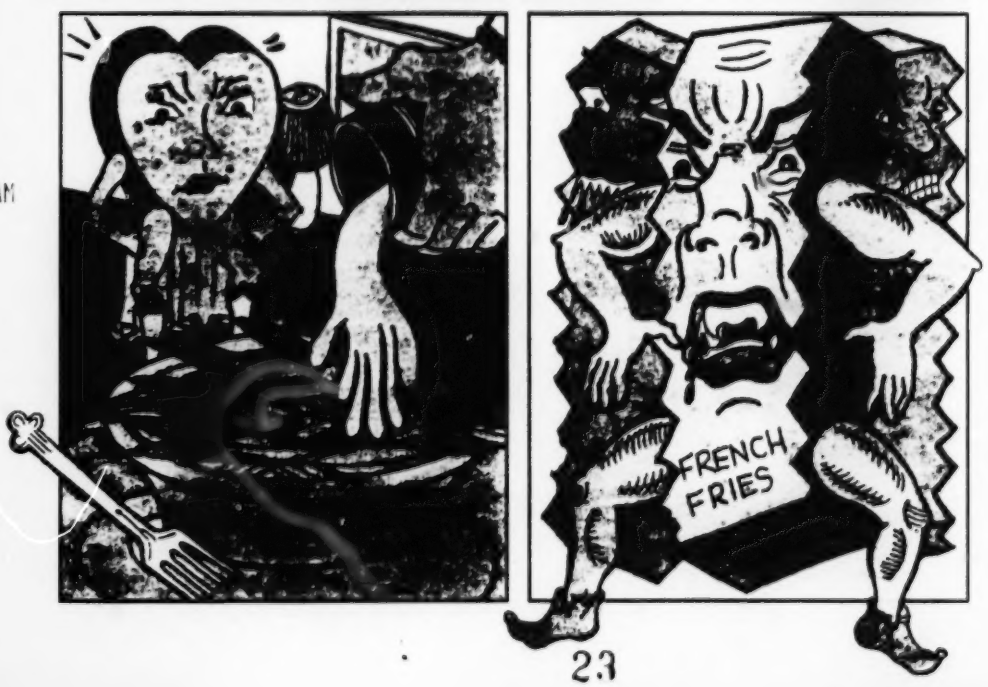
CHOOSE

FRESH, FROZEN, OR CANNED VEGETABLES

DECREASE

VEGETABLES MADE WITH BUTTER, CHEESE, OR CREAM SAUCE

FRIED VEGETABLES LIKE FRENCH FRIES



FRUITS

Fruits are winners for heart health. They have almost no saturated fat and no cholesterol. Try these for a change of pace:

- ☆ Carry an extra piece in your lunch for dessert or a quick snack.
- ☆ Take frozen boxes of fruit juices on trips. They'll be ready to drink when you get thirsty.

NUTRIENTS: Carbohydrates, fiber, and vitamins.

CHOOSE

FRESH, FROZEN, CANNED, OR DRIED FRUITS

FRESH, FROZEN, OR CANNED FRUIT JUICE

DECREASE

FRUIT SERVED WITH BUTTER OR CREAM SAUCE

FRIED FRUIT LIKE BANANA CHIPS

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FATS AND OILS

Don't get confused by the Fats and Oils group. Although we need some fat, most of us get too much fat, especially the saturated kind. Eating unsaturated fats in place of saturated fats can help lower your blood cholesterol level. Because all types of fats are high in calories, cut back in this group if you are overweight.

- ☆ Foods in the **CHOOSE** column are sources of unsaturated fats and contain small amounts of saturated fats. Use them more often.
- ☆ Foods in the **DECREASE** column are high in saturated fats. Use them less often.

NUTRIENTS: Saturated and unsaturated fats, cholesterol, and very small amounts of vitamins and minerals.

CHOOSE

UNSATURATED OILS LIKE SUNFLOWER, SAFFLOWER, SESAME, SOYBEAN, CORN, OLIVE, CANOLA OIL

MARGARINE OR SHORTENING MADE FROM UNSATURATED OILS LISTED ABOVE; LIGHT OR DIET MARGARINE

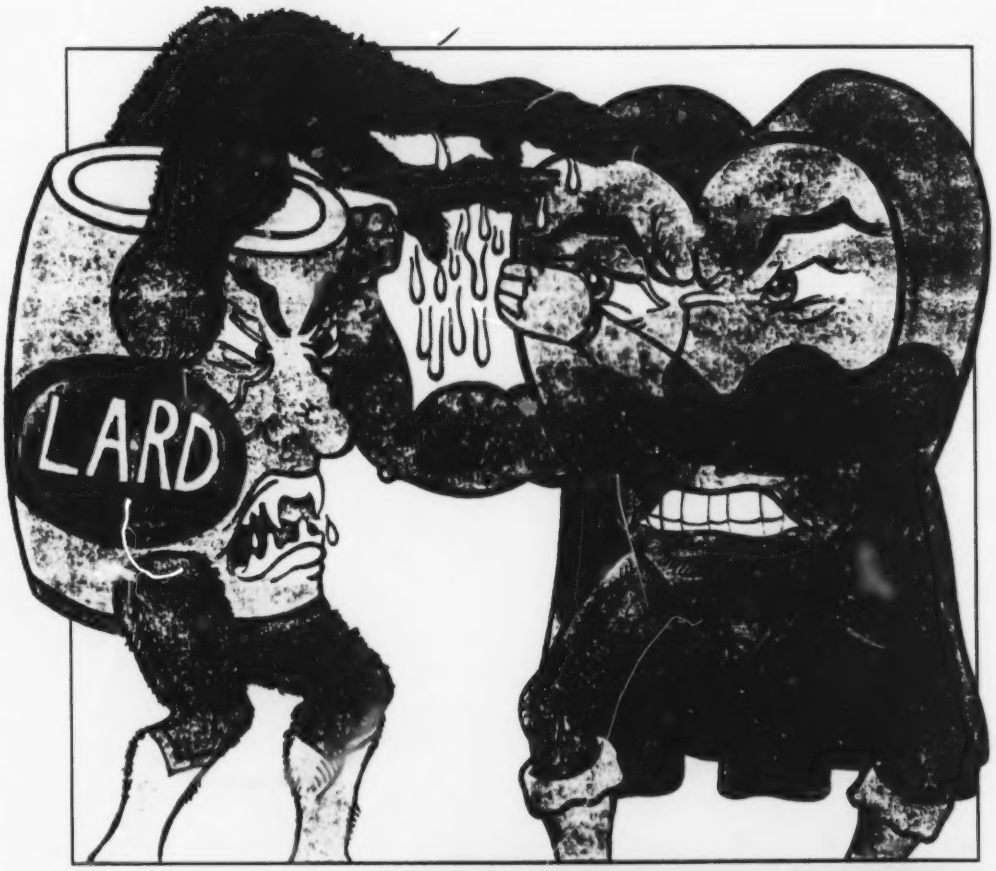
SALAD DRESSINGS MADE WITH UNSATURATED OILS LISTED ABOVE

REDUCED-FAT MAYONNAISE

SEEDS AND NUTS LIKE PEANUT BUTTER, OTHER NUT BUTTERS

COCOA POWDER

OLIVES AND AVOCADO — EVEN THOUGH THESE FOODS ARE VEGETABLES, THEY ARE LISTED IN THIS GROUP BECAUSE THEY ARE HIGH IN UNSATURATED FATS



Decrease

Coconut oil, palm kernel oil, palm oil

Butter, lard, bacon fat

Shortening

Dressings made with egg yolk, cheese, sour cream, whole milk

Coconut

Chocolate

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CHOOSE

FRUIT DRINKS, LEMONADE, FRUIT PUNCH

LOW-FAT FROZEN DESSERTS LIKE SHERBET, SORBET, FRUIT ICE, POPSICLES

HOMEMADE LOW-FAT COOKIES, CAKE, PIE, PUDDING

PLAIN POPCORN AND PRETZELS

GINGERSNAPS, FIG BAR COOKIES

ANGEL FOOD CAKE

FRUIT-FLAVORED GELATIN

CANDY LIKE CANDY CORN, GUMDROPS, HARD CANDY, JELLY BEANS

MAKE SNACKS COUNT

We all snack, and snacks can be okay. You may even need to snack to get all the energy and nutrients you need to grow especially if you do a lot of sports or activities. When you are traveling, it's a good idea to plan ahead and take snacks with you.

- ☆ Choose snacks from all of the food groups to help you get the nutrients you need.
- ☆ Select foods from the **CHOOSE** column; limit those in the **DECREASE** column since they are high in saturated fat.

Many sweets and snack foods are high in calories, sugar, fat, and cholesterol and low in other nutrients. Choosing foods from the other food groups should be your first choice.

DECREASE

ICE CREAM AND FROZEN TREATS MADE WITH ICE CREAM, AND WHOLE MILK

STORE-BOUGHT, HIGH-FAT COOKIES, CAKES, CREAM PIES, DOUGHNUTS

CHOCOLATE CANDY

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SPEND YOUR QUARTERS WISELY

Vending machines sometimes have snacks low in saturated fat and cholesterol. If you eat from a vending machine a lot at school or when you are traveling, it is important to take the time to look extra hard. Here are some clues:

- Fresh or canned fruit
- Raisins and other dried fruits
- Fruit juice and vegetable juice
- Snack mixes of cereal and dried fruit with a small amount of nuts and seeds
- Low-fat crackers and cookies, like fig bar cookies and gingersnaps
- Peanut butter and low-fat crackers
- Hard candy, candy corn, gumdrops
- Pretzels

MIX AND MATCH BAG LUNCH IDEAS

CREATE YOUR OWN BAG LUNCHES.

Create your own bag lunches which are low in saturated fat and cholesterol. For a balanced lunch, try to choose at least one item from each food group and check it off. If you want dessert, try something from the Fruits or Dairy Products groups. A sweet or snack-type food would be okay too as long as you don't eat too many the rest of the day.

MEAT, POULTRY, FISH, AND SHELLFISH

- ❑ Chicken or turkey (no skin)
- ❑ Tuna (packed in water)
- ❑ Turkey ham
- ❑ Chicken or turkey roll
- ❑ Low-fat lunch meats
- ❑ Chicken hot dogs (once in a while)

DAIRY PRODUCTS

- ❑ Skim or 1% milk
- ❑ Buttermilk
- ❑ Low-fat yogurt or cottage cheese
- ❑ Low-fat cheese
- ❑ Fruited nonfat or low-fat yogurt

VEGETABLES

- ❑ Tomato or vegetable juice
- ❑ Carrot or celery sticks
- ❑ Cauliflower or broccoli
- ❑ Cucumber slices
- ❑ Salad
- ❑ Sprouts
- ❑ Lettuce
- ❑ Tomatoes
- ❑ Three-bean salad
- ❑ Coleslaw

BREADS, CEREALS, PASTA, RICE, DRY PEAS AND BEANS

- ❑ Breads of all kinds:
  - ☆ whole-wheat
  - ☆ cinnamon raisin
  - ☆ bran
  - ☆ oatmeal
  - ☆ pumpernickel
- ❑ Pita bread
- ❑ Bagel
- ❑ Tortilla
- ❑ English muffin
- ❑ Hard roll
- ❑ Hamburger or hot dog bun
- ❑ Sub roll

FRUITS

All kinds, canned, frozen, or fresh:

- ❑ Fruit juice
- ❑ Bananas
- ❑ Berries
- ❑ Cherries
- ❑ Melon wedges
- ❑ Oranges
- ❑ Peaches
- ❑ Pineapple chunks
- ❑ Tangerine
- ❑ Raisins and other dried fruits
- ❑ Grapes
- ❑ Apples
- ❑ Pears

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Bag Lunch Ideas

SAMPLE LUNCH 1

	FOOD GROUP
SUBMARINE SANDWICH:	
SUB ROLL	BREADS
TURKEY BREAST	MEAT
LEAN HAM	MEAT
LETTUCE LEAF	VEGETABLE
TOMATO SLICES	VEGETABLE
MUSTARD	EXTRA
APPLE	FRUIT
SKIM MILK	DAIRY
HOMEMADE OATMEAL COOKIES	SWEETS

SAMPLE LUNCH 2

	FOOD GROUP
ROAST BEEF SANDWICH:	
WHOLE-WHEAT BREAD	BREADS
LEAN ROAST BEEF	MEAT
MAYONNAISE	FAT (UNSATURATED)
LETTUCE	VEGETABLE
CARROT STICKS	VEGETABLE
GRAPES	FRUIT
1% MILK	DAIRY
FIG BAR COOKIES	SWEETS

SAMPLE LUNCH 3

	FOOD GROUP
TUNA SANDWICH:	
PITA BREAD	BREADS
TUNA PACKED IN WATER	MEAT
WITH MAYONNAISE	FAT (UNSATURATED)
SPROUTS	VEGETABLE
COLESLAW	VEGETABLE
BANANA	FRUIT
STRAWBERRY NONFAT YOGURT	DAIRY
SELTZER OR MINERAL WATER	

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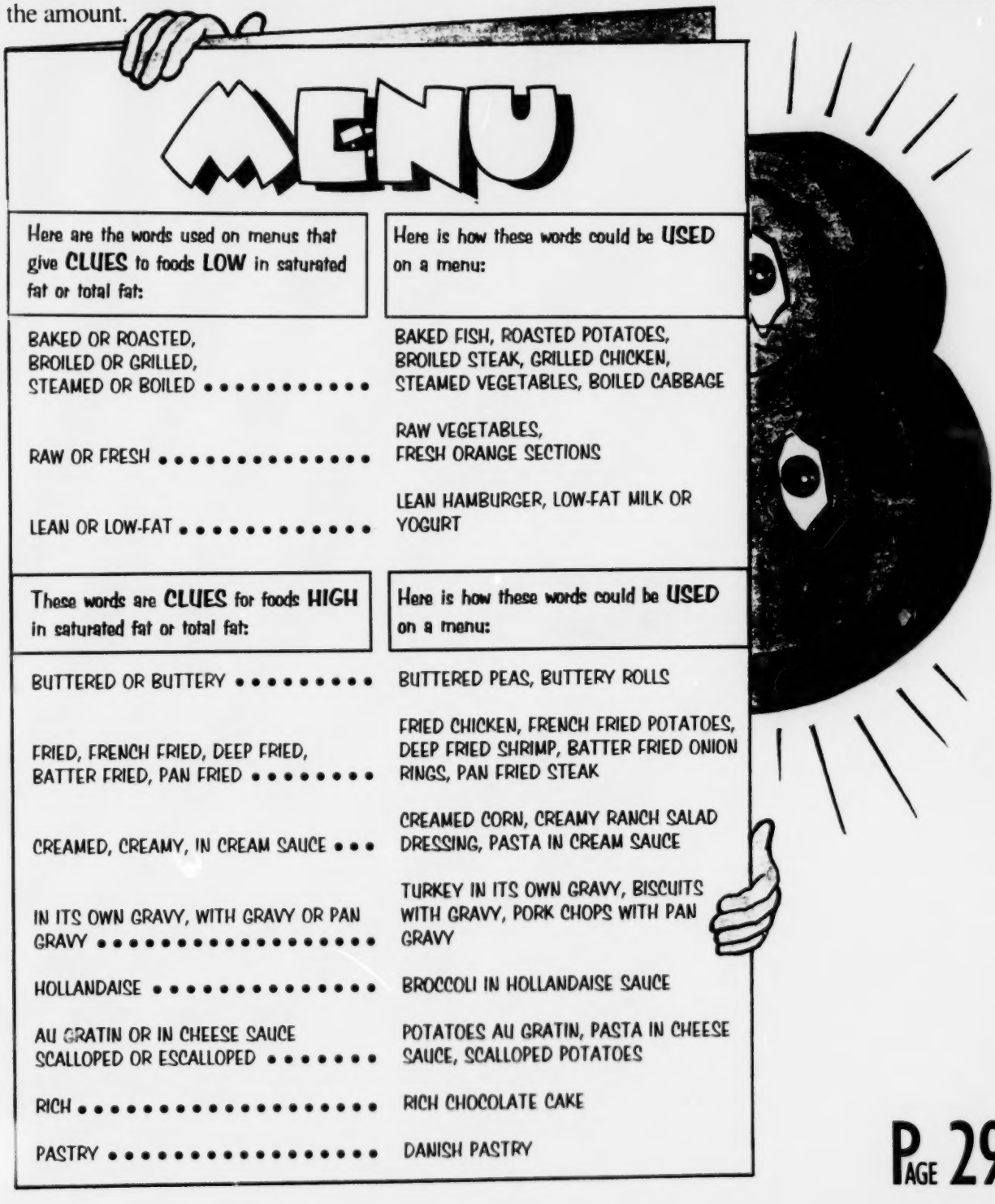
RESTAURANT MENUS HAVE HIDDEN SURPRISES

EATING OUT IS A SPECIAL TREAT.

Eating out is a special treat. It may make keeping track of saturated fat a little trickier. But you can still control which foods you choose and the amount.



Here are the words used on menus that give **CLUES** to foods **LOW** in saturated fat or total fat:	Here is how these words could be **USED** on a menu:
BAKED OR ROASTED, BROILED OR GRILLED, STEAMED OR BOILED	BAKED FISH, ROASTED POTATOES, BROILED STEAK, GRILLED CHICKEN, STEAMED VEGETABLES, BOILED CABBAGE
RAW OR FRESH	RAW VEGETABLES, FRESH ORANGE SECTIONS
LEAN OR LOW-FAT	LEAN HAMBURGER, LOW-FAT MILK OR YOGURT

These words are **CLUES** for foods **HIGH** in saturated fat or total fat:	Here is how these words could be **USED** on a menu:
BUTTERED OR BUTTERY	BUTTERED PEAS, BUTTERY ROLLS
FRIED, FRENCH FRIED, DEEP FRIED, BATTER FRIED, PAN FRIED	FRIED CHICKEN, FRENCH FRIED POTATOES, DEEP FRIED SHRIMP, BATTER FRIED ONION RINGS, PAN FRIED STEAK
CREAMED, CREAMY, IN CREAM SAUCE	CREAMED CORN, CREAMY RANCH SALAD DRESSING, PASTA IN CREAM SAUCE
IN ITS OWN GRAVY, WITH GRAVY OR PAN GRAVY	TURKEY IN ITS OWN GRAVY, BISCUITS WITH GRAVY, PORK CHOPS WITH PAN GRAVY
HOLLANDAISE	BROCCOLI IN HOLLANDAISE SAUCE
AU GRATIN OR IN CHEESE SAUCE SCALLOPED OR ESCALLOPED	POTATOES AU GRATIN, PASTA IN CHEESE SAUCE, SCALLOPED POTATOES
RICH	RICH CHOCOLATE CAKE
PASTRY	DANISH PASTRY

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FOODS IN THE FAST LANE

You Can Eat Right and Still Eat Fast Foods.

You don't have to give up eating fast foods. You can eat right and still eat fast foods.

Here are some tips on fast foods to choose:

- Order a small hamburger instead of a larger one. Try the extra lean hamburger.
- Order roast beef for a leaner choice than most burgers.
- Order a baked potato instead of french fries. Be careful of high-fat toppings like sour cream or cheese.
- Order grilled, broiled, or baked fish and chicken.
- Order skim or 1% milk instead of a shake. Try the low-fat frozen yogurt.
- Order a salad. Use vinegar and oil or low-calorie dressing more often than creamy salad dressing.
- Create a salad at a salad bar. Choose any raw vegetables, fruits, or beans. Limit high saturated fat toppings of cheese, fried noodles, bacon bits, and some salads made with mayonnaise. Also limit salad dressings high in saturated fat and cholesterol.
- For sandwich toppings try lettuce, tomato, and onion, pickles, mustard, and ketchup instead of high saturated fat toppings like cheese, bacon, special sauces, or butter.
- Order pizza with vegetable toppings like peppers, mushrooms or onions instead of extra cheese, pepperoni, or sausage.

BE ACTIVE... EXERCISE

Exercise is fun and will help you feel great. You will have more energy, feel more relaxed, and become stronger by being active. Your muscles will firm up and even falling asleep will be easier. You will look great and feel better than ever!

The good doesn't stop there. Exercise is good for your heart. Shaping up and staying fit helps you control high blood cholesterol and high blood pressure. Also, it helps you keep your weight just right by burning up extra calories. But just because you exercise and keep your weight just right don't think that you can eat anything you want. You still need to eat foods that are low in saturated fat and cholesterol.

EXERCISE IS FUN AND WILL HELP YOU FEEL GREAT.

WHAT'S GOOD FOR YOUR HEART

Exercise that helps your heart:

- raises your heart and breathing rates,
- lasts 15 to 30 minutes without stopping, and
- is repeated 3 times a week or more.

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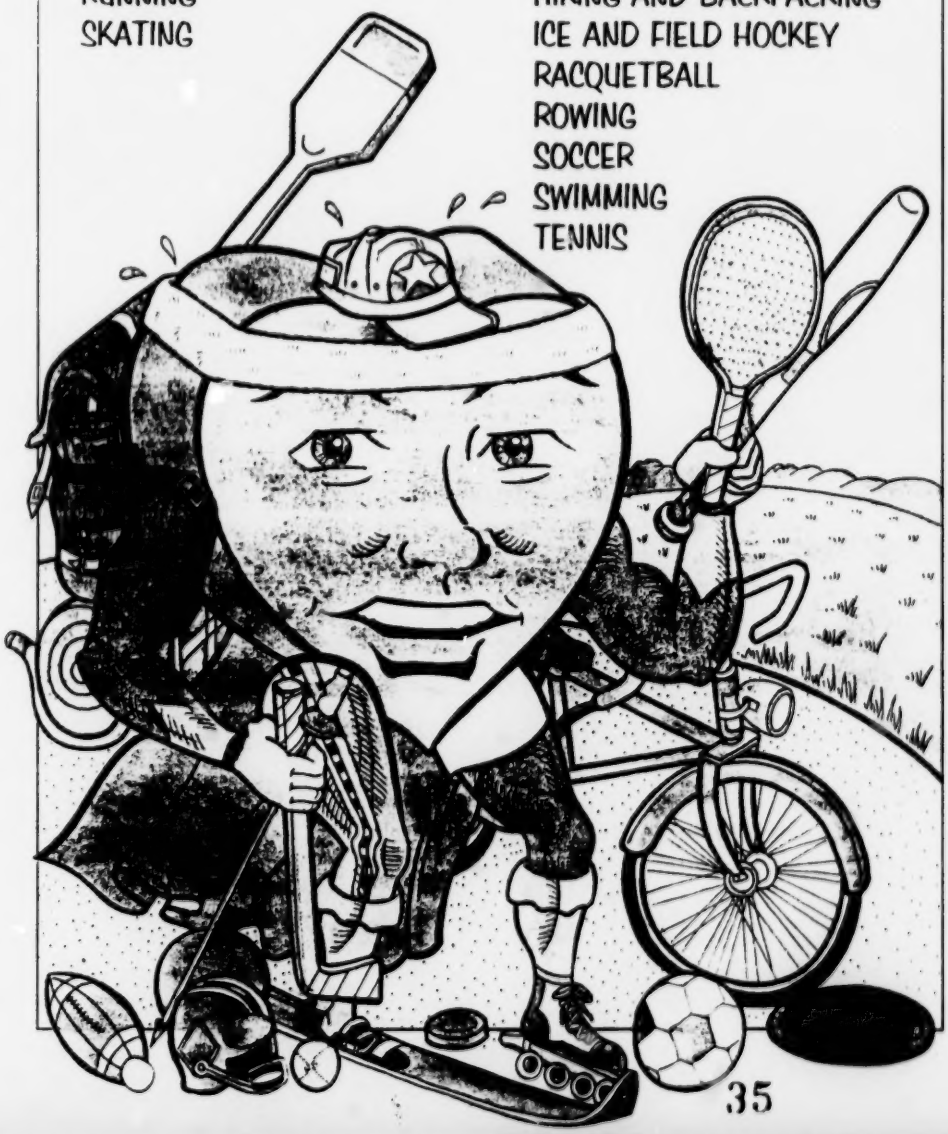
EXERCISE IS GOOD FOR YOUR HEART.

The chart below gives examples of different kinds of exercise that you can do by yourself or with a group of friends. Doing these exercises for 15 to 30 minutes, at least 3 days a week, can help keep your heart strong.

EXERCISE ON YOUR OWN	EXERCISE WITH SOME FRIENDS
BICYCLING	BASEBALL AND SOFTBALL
BRISK WALKING	BASKETBALL
DANCING	CROSS-COUNTRY SKIING
JOGGING	FOOTBALL
JUMPING ROPE	FRISBEE®
ROLLER BLADING	GYMNASTICS
RUNNING	HIKING AND BACKPACKING
SKATING	ICE AND FIELD HOCKEY
	RACQUETBALL
	ROWING
	SOCCER
	SWIMMING
	TENNIS



Pick an activity that is fun. Do it by yourself or with friends. Plan a skating party. Or pack a picnic and take a day hike. Throw a dance party. Join a sports team. It all adds up!

Promise yourself to plan an activity. Invite a friend! Do it now!

INVITATION

ACTIVITY: _____

_____

DATE: _____ TIME: _____

PLACE: _____

_____

FRIENDS: _____

_____

TAKE A LOOK AT YOURSELF

Now that you have read about what your eating and exercise habits should be, it's time to look at what your habits really are.

- Can you say that your diet is low in saturated fat and cholesterol?
- Do you exercise at least 3 times a week for at least 15-30 minutes each time without stopping?

The only way to be sure about your answers to these questions is to keep a record. For **3 days** keep a list of all that you eat and drink. Record the type of food you eat and how much. Keep track of your physical activity too.

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MAKE A CHART LIKE THIS TO HELP YOU KEEP TRACK OF WHAT YOU EAT AND HOW MUCH PHYSICAL ACTIVITY YOU GET.

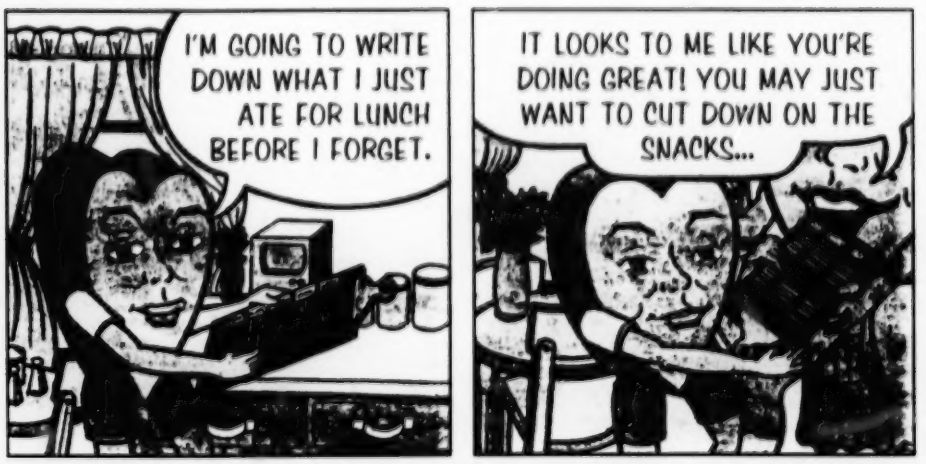
To be sure that you don't forget to write something down, write foods down when you eat or drink them. That might mean carrying a piece of paper and a pen around with you for 3 days. Or, when you get home from school, list all that you ate while away from home. Perhaps your parents can help at the end of each day. Pick a method that helps you keep a complete and accurate record.

When you are done, take a look. Compare what you ate to the chart of food groups, "Foods Are Not Good or Bad, Eating Habits Are." Are you surprised at what you ate and how much?

- Can you find the foods that are high in saturated fat or cholesterol? (Check the **Decrease** column next to these foods.)
- Are there low saturated fat foods you would eat instead?
- Can you find the foods that are low in saturated fat and cholesterol? (Check the **Choose** column next to these foods.)

Exercise is good for your heart. Did you exercise on these 3 days? Did you exercise at least 15-30 minutes without stopping?

Looking at the foods and types of exercise you listed here will help you understand your eating and exercise habits. Show your mom and dad, or even your doctor, your 3 day record. They will help you make any more changes that you may need. Knowing what you need to improve will help you form heart-healthy habits.


I'M GOING TO WRITE DOWN WHAT I JUST ATE FOR LUNCH BEFORE I FORGET.
IT LOOKS TO ME LIKE YOU'RE DOING GREAT! YOU MAY JUST WANT TO CUT DOWN ON THE SNACKS...

	CHOOSE	DAY 1	DECREASE	CHOOSE	DAY 2	DECREASE	CHOOSE	DAY 3	DECREASE
BREAKFAST									
LUNCH									
DINNER									
SNACKS									
EXERCISE									

A FAMILY PORTRAIT

FILL IN YOUR OWN FAMILY TREE.

By now, you probably realize that eating and exercise habits as well as heredity influence blood cholesterol levels, one of the risk factors for heart disease. Habits and heredity also influence other risk factors and a person's overall risk of heart disease. Take a look at the habits, risk factors and history of heart disease of various family members. Try these questions on your grandparents, parents, brothers, and sisters. So that you don't forget what they tell you, fill in the blanks on the family tree.

Directions: Write your relatives' names under each square and circle. The squares are for males. The circles are for females. If you need more squares and circles, draw them in.

Talk to your family. Read them each statement and ask them whether it is TRUE or FALSE. For each statement that they say is TRUE for them, put a separate check in their circle or square. If it is false, don't put anything.

STATEMENTS:

HABITS WHICH MIGHT EXPLAIN WHY SOME MEMBERS HAVE HEART DISEASE OR VARIOUS RISK FACTORS FOR HEART DISEASE.

- ✓ "I DO NOT EAT A HEART HEALTHY DIET."
- ✓ "I EXERCISE LESS THAN 3 TIMES PER WEEK."
- ✓ "I SMOKE CIGARETTES."

FACTORS WHICH INCREASE A PERSONS RISK OF HEART DISEASE. THESE FACTORS ARE INFLUENCED BY BOTH HABITS AND HEREDITY.

- ✓ "I HAVE A HIGH BLOOD CHOLESTEROL LEVEL."
- ✓ "I HAVE HIGH BLOOD PRESSURE."
- ✓ "I WEIGH TOO MUCH."

A HISTORY OF HEART DISEASE.

- ✓ "I HAVE HEART DISEASE OR TAKE PILLS FOR A HEART PROBLEM."
- ✓ "I HAD A HEART ATTACK."

Look at the whole tree. Did you have a lot of checks in the circles and squares? If you did NOT have lots of checks, then you and your family are doing well. Keep up the good work.

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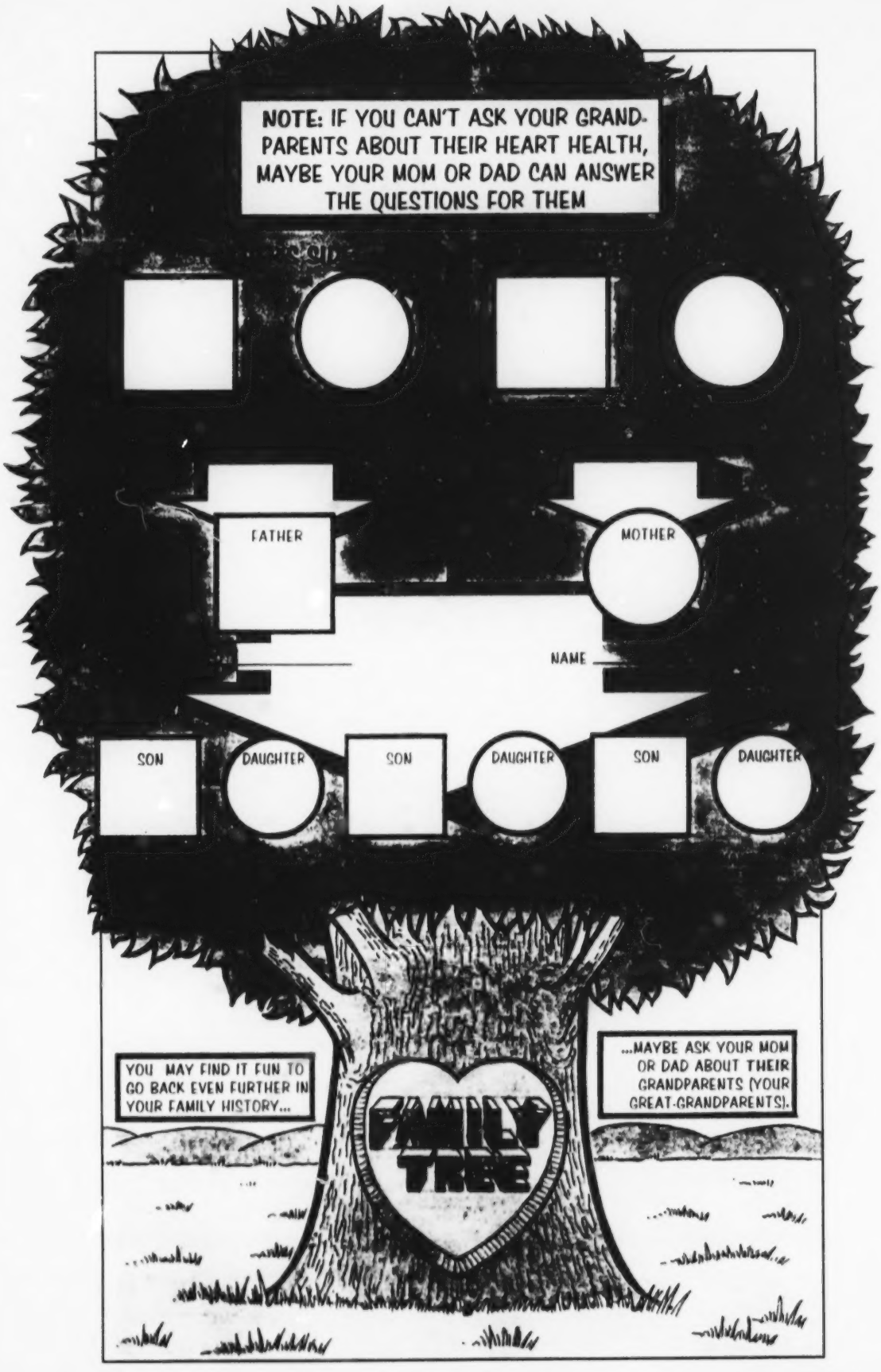
NOTE: IF YOU CAN'T ASK YOUR GRAND-PARENTS ABOUT THEIR HEART HEALTH, MAYBE YOUR MOM OR DAD CAN ANSWER THE QUESTIONS FOR THEM
FATHER
MOTHER
NAME
SON
DAUGHTER
SON
DAUGHTER
SON
DAUGHTER
YOU MAY FIND IT FUN TO GO BACK EVEN FURTHER IN YOUR FAMILY HISTORY...
...MAYBE ASK YOUR MOM OR DAD ABOUT THEIR GRANDPARENTS (YOUR GREAT-GRANDPARENTS).
FAMILY TREE

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If you DID have lots of checks, you can help yourself and your family change. Talk to your family about how you all can make changes to lower your risk for heart disease. You can all eat right and exercise more often, don't smoke and lose weight if overweight. This will help control blood cholesterol levels and other risk factors for heart disease too. Help them to make the right choices.

YOU ARE IN CONTROL

Now you know that to control or lower your blood cholesterol you need to eat right and exercise. You may *know* what to do, but you may not *do* it. You have the power to choose what to do—you are in control. This booklet gives you the know-how. Get your family and friends involved with what you choose to do. Their help will make your choices easy. Booklets for younger and older brothers, sisters, and friends and your parents can be ordered from:

National Cholesterol Education Program
NHLBI Information Center
Post Office Box 30105
Bethesda, Maryland 20824-0105

KEEP TRACK OF YOUR BLOOD CHOLESTEROL NUMBER

Eating right and exercising more often will help lower your blood cholesterol level and reduce your future risk of heart disease. Keep track of how well you do. Ask your doctor to give you your cholesterol number. Keep a record of it on this page.

DATE	TOTAL CHOLESTEROL
December 1, 1992	210

[redacted]XAMPLE

DISCRIMINATION PROHIBITED: Under provisions of applicable public laws enacted by Congress since 1964, no person in the United States shall, on the grounds of race, color, national origin, handicap, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity (or, on the basis of sex, with respect to any education program or activity) receiving Federal financial assistance. In addition, Executive Order 11141 prohibits discrimination on the basis of age by contractors and subcontractors in the performance of Federal contracts, and Executive Order 11246 states that no federally funded contractor may discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Therefore, the National Heart, Lung, and Blood Institute must be operated in compliance with these laws and Executive Orders.

NATIONAL
CHOLESTEROL
EDUCATION
PROGRAM

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AND HUMAN SERVICES
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